

Appl. No. : 10/764991
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AMENDMENTS TO THE

IN THE CLAIMS:

1. **(Currently amended)** A tubular wire support for combination with a sheath to produce a bifurcated endoluminal prosthesis, said tubular wire support comprising:

a main body support structure having a proximal end, a distal end and a central lumen extending therethrough, the support structure comprising a plurality of at least a first and second axially adjacent tubular segments, each segment comprising a plurality of wall struts connected by proximal and distal bends such that each segment has a number of proximal and distal bends;

a first branch support structure having a proximal end, a distal end and a central lumen therethrough connected to the main body support structure; and

a second branch support structure having a proximal end, a distal end and a central lumen extending therethrough, connected to the main body support structure;

wherein the number of proximal and distal bends in the plurality of axially adjacent tubular segments varies from the distal end to the proximal end of the main body support section.

~~at least two sliding links in between the first and second segments; and~~
~~each of the at least two sliding links configured for axial movement along a wall strut.~~

2-33. **(Cancelled)**

34. **(Previously presented)** The tubular wire support of Claim 1, further comprising a tubular sheath on the wire support.

35. **(Currently amended)** The tubular wire support of Claim [[2]] 1, wherein the sheath comprises a PTFE sleeve surrounding at least a central portion of the wire support.

36. **(Currently amended)** The tubular wire support of Claim 1, wherein the main body support structure and the first and second branch support structure structures are self-expandable from a radially collapsed state to a radially expanded state.

37. **(Currently amended)** The tubular wire support of Claim 1, wherein the wire in each support structure comprises a wire that forms the [[a]] series of proximal

bends and ~~, a series of~~ distal bends and ~~a series of~~ struts connecting the proximal and distal bends to form a tubular segment.

38. **(Previously presented)** The tubular wire support of Claim 37, wherein each tubular segment comprises from about 4 proximal bends to about 12 proximal bends.

39. **(Previously presented)** The tubular wire support of Claim 1, wherein the first and second branch support structures are pivotably attached to the main body support structure.

40-41. (Canceled)

42. **(Currently amended)** An endoluminal prosthesis, comprising an elongate flexible wire, formed into a plurality of axially adjacent tubular segments spaced along an axis, each tubular segment comprising a zig-zag section of the wire~~[,]~~ and having a plurality number of proximal bends and distal bends, at least one of the plurality of proximal bends and plurality of distal bends having loops thereon, with the wire continuing between each adjacent tubular segment, wherein the prosthesis is radially compressible into a first, reduced cross sectional configuration for implantation into a body lumen, and self expandable to a second, enlarged cross sectional configuration at a treatment site in a body lumen, and wherein the number of proximal and distal bends in the plurality of axially adjacent tubular segments varies from the distal end to the proximal end of the main body support section at least some of the bends in one tubular segment are slidably connected to at least some of the wall sections in the adjacent tubular segment.

43. **(Previously presented)** An endoluminal prosthesis as in Claim 42, comprising at least three segments formed from said wire.

44. **(Previously presented)** An endoluminal prosthesis as in Claim 43, further comprising an outer tubular sleeve surrounding at least a portion of the prosthesis.

45. **(Previously presented)** An endoluminal prosthesis as in Claim 44, wherein the sleeve further comprises at least one lateral perfusion port extending therethrough.

46. **(Previously presented)** An endoluminal prosthesis as in Claim 42, wherein the prosthesis has a proximal end and a distal end, and at least one of the proximal end and distal end

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are expandable to a larger diameter than a central section of the prosthesis in an unconstrained expansion.

47. **(Previously presented)** An endoluminal prosthesis as in Claim 42, wherein the prosthesis has an expansion ratio of at least about 1:4.

48. **(Previously presented)** An endoluminal prosthesis as in Claim 47, wherein the prosthesis has an expansion ratio of at least about 1:5.

49. **(Previously presented)** An endoluminal prosthesis as in Claim 42, wherein the prosthesis has an expanded diameter of at least about 20 mm in an unconstrained expansion, and the prosthesis is implantable using a catheter no greater than about 20 French.

50. **(Previously presented)** A prosthesis as in Claim 49, wherein the prosthesis has an expanded diameter of at least about 25 mm, and is implantable on a delivery device having a diameter of no more than about 20 French.

51. **(New)** The tubular wire support of Claim 1, wherein the number of proximal and distal bends in the plurality of axially adjacent tubular segments decreases from the distal end to the proximal end of the main body support section.

52. **(New)** The tubular wire support of Claim 51, wherein axially adjacent tubular segments in the main body support comprises a first segment and a last segment and the number of proximal and distal bends in the last segment is between about 50% to about 80% the number of proximal and distal bends in the first segment.

53. **(New)** An endoluminal prosthesis as in Claim 42, wherein the number of proximal and distal bends in the plurality of axially adjacent tubular segments decreases from the distal end to the proximal end of the main body support section

54. **(New)** An endoluminal prosthesis as in Claim 53, wherein axially adjacent tubular segments in the main body support comprises a first segment and a last segment and the number of proximal and distal bends in the last segment is between about 50% to about 80% the number of proximal and distal bends in the first segment.